



**JIMCO**<sup>®</sup>  
UV-C  
[WWW.JIMCO.DK](http://WWW.JIMCO.DK)

EST. 1992

ENVIRONMENTALLY FRIENDLY  

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DISINFECTION  
FLO-D<sup>®</sup> TECHNOLOGY



## INNOVATION AND DRIVE

DESIGNED AND DEVELOPED IN DENMARK

### JIMCO A/S: Pioneers in Air, Disinfection and Wastewater Treatment

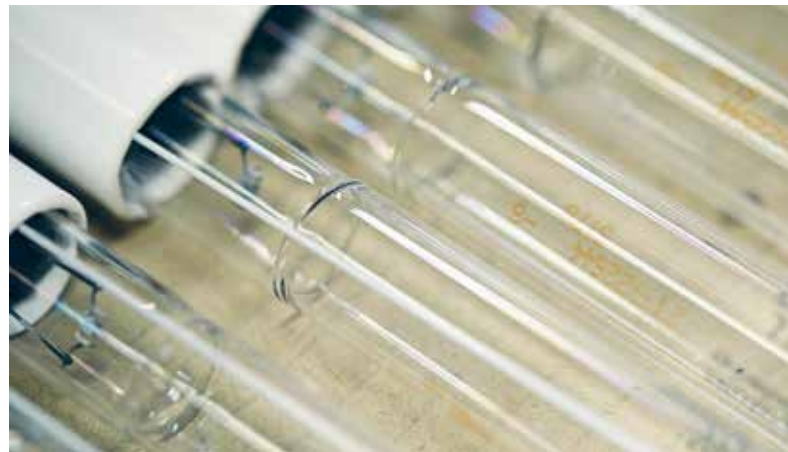
Since the launch of our first air purification unit in 1992, JIMCO A/S has been at the forefront of advanced environmentally friendly solutions for air and disinfection as well as wastewater treatment.

Over the years, JIMCO A/S has expanded its reach and now delivers its products to a wide range of industries and institutions on a global scale.

Regardless of the project size, JIMCO A/S has a solution.

The company is known for combining common sense with innovative thinking, which has led to deliveries to the world's leading food industries.

### COMPLETE DISINFECTION OF SURFACES IN PRODUCTION FACILITIES



#### WHY CHOOSE JIMCO'S DISINFECTION TECHNOLOGY?

- ✓ Eliminate manual disinfection with water and chemicals
- ✓ Save large amounts of water and energy, normally used for heating, drying, and wastewater treatment
- ✓ Efficient disinfection in hard-to-reach places such as corners, cracks, ventilation ducts, cooling surfaces, surfaces, floor drains, and technical installations
- ✓ Avoid the use of strong chemicals, which have a negative impact on the environment and the working environment
- ✓ Reduce CO<sub>2</sub> emissions and prevent the discharge of chlorinated wastewater

#### Efficient disinfection - without manual procedures, chemicals, or water.

JIMCO introduces UV-C ozone surface disinfection, also called FLO-D<sup>®</sup>, which stands for Photolytic Oxidation Disinfection, as a further application of JIMCO's award-winning UV-C technology, which received the EU's environmental award in year 2000 and has been in use since 1992 in air purification systems. These systems have helped eliminate unpleasant odors and improve both outdoor and indoor environments.

JIMCO FLO-D<sup>®</sup> enables surface disinfection without the need for manual handling, offering a range of benefits in terms of economy, safety, environment, and working conditions.

FACT: -Ozone naturally converts back to oxygen, ensuring an environmentally friendly treatment without harmful residues.

## DISCOVER THE POWER OF FLO-D®

### FOR EFFICIENT AND CHEMICAL-FREE DISINFECTION

Here are some of the benefits of having a FLO-D® unit:

**✓Efficient disinfection:**

FLO-D® utilizes a combination of UV-C technology and ozone to eliminate bacteria, viruses, mold, and other harmful microorganisms. This effective disinfection ensures a cleaner, healthier, and safer environment. It cleans everywhere there is air - ventilation, floor drains, cable trays, etc.

**✓Environmentally friendly solution:**

FLO-D® eliminates the need for water or chemicals. This makes it an environmentally friendly solution, as it does not leave behind chemically emulsified wastewater.

**✓No chemical impact:**

By avoiding the use of chemicals in the disinfection process, FLO-D® eliminates the risk of contamination of food, surfaces, and the environment.

**✓Economic saving:**

By not having to purchase or store chemicals for disin-

*FLO-D® stands for: Photolytic Oxidation Disinfection*

fection, economic savings are achieved. FLO-D®'s efficient disinfection system also helps reduce the costs associated with cleaning procedures, maintenance, water heating, and wastewater treatment, as well as reducing labor needs.

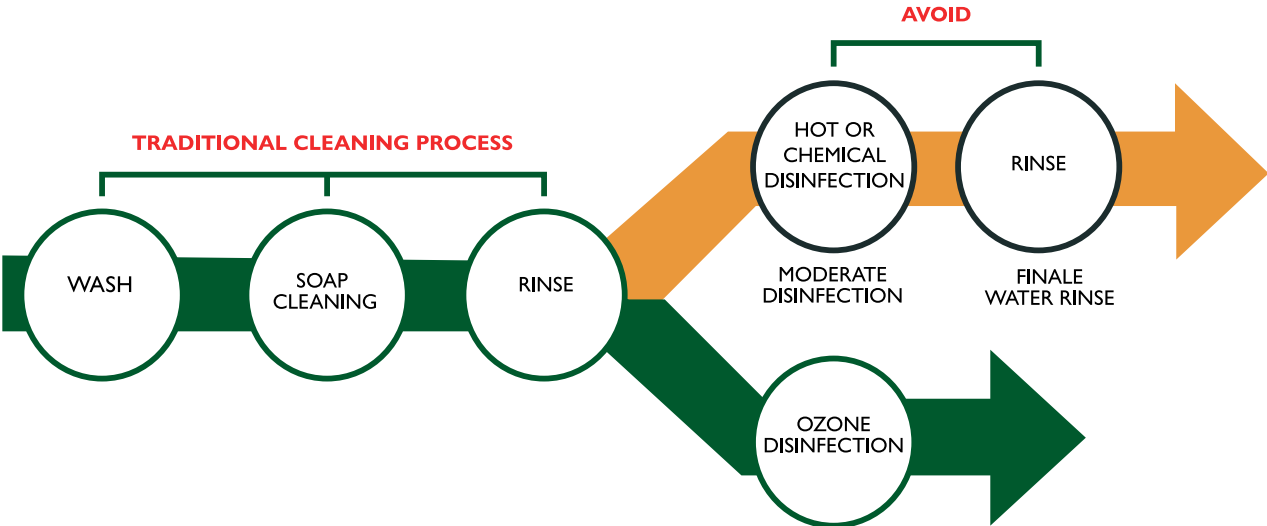
**✓Easy to use:**

FLO-D® units are designed to be user-friendly. They are easy to operate and can be adapted to specific needs and requirements. With an easy-to-use touchscreen, you can easily set treatment parameters and monitor the unit's operation.

**✓Flexible application:**

FLO-D® units can be used across a wide range of applications and industries, including the food industry, transportation, and healthcare, among others. They can be adapted to different room sizes and types.

## GUARANTEED RESULTS FOR EFFICIENT DISINFECTION & DATA LOGGING



# FLO-D<sup>®</sup> MINI

## TECHNICAL DESCRIPTION

### FLO-D<sup>®</sup> MINI - Mark 2

UV-C lamps: 8 pcs. 70 watt

Quartz sleeve: 8 pcs. (in cold storage)

Power supply EU: 1x230V + PE 50/60Hz, 10A

Power supply US: 1x115V + PE 50/60Hz, 10A

Consumption EU: 650 watt

Consumption US: 747 watt

Display: Proface PLC, color panel

Room-volume: Disinfection: Up to 315 m<sup>3</sup>  
approximately 11.000 cubic feet

#### Measurements:

**Height:** 1150 mm

**Width:** 560 mm

**Depth:** 890 mm

**Weight:** 59 Kg

**Integrated** - temperature and moisture sensor,  
ozone meter, and access point.

*Patented data logging system for documentation.*



US Patent No. 14/436,318  
PCT/EP 2012/070820

# SPECIFICATIONS



- 1. Touchscreen**  
Set your treatment specific to your location
- 2. Connect**  
to smartphone or tablet
- 3. USB port**  
Document treatments with data logging
- 4. Ozone Measuring Unit (OMS)**
- 5. Wire**  
5 or 10 meter  
16.4 feet, and 32.8 feet
- 6. Loudspeaker**
- 7. Power Socket**  
5 meter (16.4 feet) cable included
- 8. Temperature & Moisture Sensor**
- 9. Nameplate**
- 10. Antenna**  
Access connection
- 11. Alarm**  
Sounds like a Siren



# FLO-D<sup>®</sup> MAXI

## FLO-D<sup>®</sup> MAXI

### TECHNICAL DESCRIPTION

UV-lamps: 30 pcs. 89 watt

Quartz sleeve: 30 pcs. (in cold storage)

Power supply EU: 3x400V + PE 50/60Hz, 16A

Power supply US: 3x480V + PE 50/60Hz, 16A

Consumption: 4,15 kW

Display: Siemens

Treatment capacity: Room size up to 1,500 m<sup>3</sup>  
approximately 53.000 cubic feet

#### Measurements:

Height: 2,100 mm

Width: 1,200 mm

Depth: 1,200 mm

Weight: 175 Kg

Connect to ventilation evacuation,  
door contacts, and motion sensors.  
Monitoring of positive and negative pressure

Includes ozone meter and door station



US Patent No. 14/436,318  
PCT/EP 2012/070820

## FLO-FIXED<sup>®</sup>

### TECHNICAL DESCRIPTION

UV-lamps: 15 pcs. 165 watt

Quartz sleeve: 15 pcs. (in cold storage)

Power supply EU: 3x400V + PE 50/60Hz, 16A

Power supply US: 3x480V + PE 50/60Hz, 16A

Consumption: 3 kW

Display: Siemens

Treatment capacity: Room size up to 1,500 m<sup>3</sup>  
approximately 53.000 cubic feet

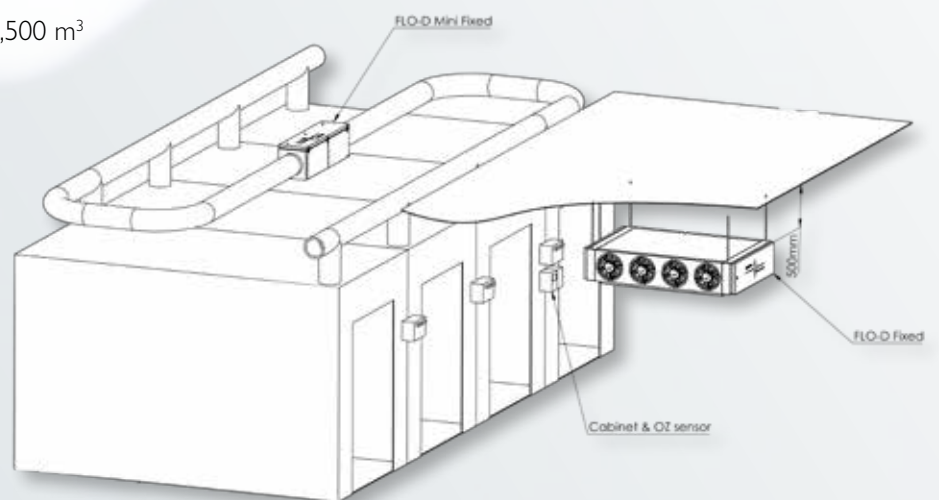
#### Measurements:

Height: 413 mm

Width: 1,866 mm

Depth: 1,216 mm

Weight: 160 Kg



### EXAMPLE OF CEILING INSTALLATION



## MONITOR YOUR DISINFECTION PROCESS

### With Ease via Cloud Solution

With Jimco's FLO-D<sup>®</sup> solution, you have the ability to monitor the operation of your disinfection system directly on your phone, tablet, or PC from the cloud.

This offers a range of valuable benefits for example in the food industry:



Monitor the operation  
- of your FLO-D<sup>®</sup> through "The Cloud" for continuous supervision

### Benefits of Cloud-Based Monitoring:

- 1. Continuous Supervision:** Follow the operation of your FLO-D<sup>®</sup> system in real-time and have instant access to key data and statistics. This allows you to ensure that the disinfection process is proceeding as planned.
- 2. Efficient Troubleshooting:** Identify and address any operational issues or errors quickly and efficiently, reducing downtime and production halts.
- 3. Data Insight:** Gain insights into the system's performance over time through historical data. This can help optimize operational processes and streamline disinfection procedures.
- 4. Remote Access:** Monitor your FLO-D<sup>®</sup> system from anywhere at any time with internet access, providing you with flexibility and convenience.
- 5. Multi-site Monitoring:** Monitor multiple factories and systems from one centralized platform. This makes it easy to compare performance across different locations and implement uniform disinfection strategies across the entire company.



## ACCURATE DATA LOGGING

### Your Reliable Documentation


FLO-D® provides a comprehensive data logging feature that allows you to monitor your disinfection process and collect important documentation. This is not just a convenient feature, but also a crucial tool, for example in the food industry.

Automatisk lagring  combined-data (2) - Skrivebeskytning

Filer Hjem Indsæt Sidelayout Formler Data Gennemse Vis Automa

O38    *f<sub>sc</sub>*

	A	B	C	D	E	F	G
1	date (UTC)	O3Level	O3Setpoint	date (UTC)	Fanspeed	Temperature	Humidity
2	06-02-2024 22:10	7.1	10	06-02-2024 22:10	70	16.505.714,00	98
3	06-02-2024 22:11	7.2	10	06-02-2024 22:11	70	16.525.608,00	98
4	06-02-2024 22:12	7.2	10	06-02-2024 22:12	70	16.5	98
5	06-02-2024 22:13	7.4	10	06-02-2024 22:13	70	16.597.946,00	98
6	06-02-2024 22:14	7.6	10	06-02-2024 22:14	70	16.597.946,00	98
7	06-02-2024 22:15	7.6	10	06-02-2024 22:15	70	16.632.307,00	98
8	06-02-2024 22:16	7.7	10	06-02-2024 22:16	70	16.6	98
9	06-02-2024 22:17	7.9	10	06-02-2024 22:17	70	16.668.474,00	98
10	06-02-2024 22:18	7.9	10	06-02-2024 22:18	70	16.706.453,00	98
11	06-02-2024 22:19	8	10	06-02-2024 22:19	70	16.675.709,00	98
12	06-02-2024 22:20	8	10	06-02-2024 22:20	70	16.7	97
13	06-02-2024 22:21	8.2	10	06-02-2024 22:21	70	16.676.613,00	98
14	06-02-2024 22:22	8.2	10	06-02-2024 22:22	70	16.818.577,00	98
15	06-02-2024 22:23	8.4	10	06-02-2024 22:23	70	16.809.534,00	98
16	06-02-2024 22:24	8.4	10	06-02-2024 22:24	70	16.8	98
17	06-02-2024 22:25	8.5	10	06-02-2024 22:25	70	16.8	98
18	06-02-2024 22:26	8.7	10	06-02-2024 22:26	70	16.8	98
19	06-02-2024 22:27	8.7	10	06-02-2024 22:27	70	16.8	98
20	06-02-2024 22:28	8.7	10	06-02-2024 22:28	70	16.8	98
21	06-02-2024 22:29	8.9	10	06-02-2024 22:29	70	16.8	98



### Why Is Data Logging Important?

- Documentation:** You get a detailed record of all activities that occur during the disinfection process. This serves as documentation that you can refer to in case of inspections, audits, and quality control.
- Troubleshooting:** If challenges or errors arise in the disinfection process, the data log can be used to identify and correct the problems. This minimizes production downtime and quality issues.
- Optimization:** By analyzing the data log, you can optimize your disinfection process over time. You can identify patterns, trends, and opportunities for improvement that can lead to more efficient procedures.
- Quality Assurance:** The data log serves as an important part of your quality assurance. It confirms that your disinfection processes have been correctly performed and meet the required standards.

With our reliable data logging feature, you can have full confidence that your disinfection process is accurate and documented at all times. It's your assurance of quality and compliance with regulations and standards in the food industry.

# ADVANTAGES



## YOUR RESOURCE-EFFICIENT SOLUTION

In food production, costs are just as important as hygiene. An aspect that makes FLO-D® the ideal solution is its a short period. Other crucial advantages of using FLO-D® in food production are:

**Economic Savings:** Traditional disinfection methods involve the use of chemicals, which constitute a significant cost. These chemicals need to be purchased, stored, and disposed of properly. With FLO-D®, the need for these chemicals is completely eliminated resulting in immediate savings on the operating budget.

**Short Payback Period:** The investment in the FLO-D® system typically pays for itself within the first year. The savings achieved by not having to purchase large quantities of chemicals can be seen as a direct profit on the bottom line.

**Reduced Maintenance:** FLO-D® requires minimal maintenance compared to traditional disinfection methods. This means lower expenses for spare parts and technical support.

**Future Savings:** Beyond the immediate economic saving, FLO-D® is a long-term investment. Companies can expect continued savings in the years to come.

In summary, FLO-D® is not only a hygienic solution but also a hygienic and cost-efficient solution for food producers and others in need of disinfection. The quick payback period and ongoing savings make it an investment with long-term value and increased profitability.

# EFFICIENCY / UV-C OZONE



Exposure time	Ozone concentration	Loaded		Control		Ozone	Reduction
		CFU/cm <sup>2</sup>		CFU/cm <sup>2</sup>	CFU/cm <sup>2</sup>		
2 hour	10 ppm	2,40E+03 (2400)	3,30E+03 (3300)	4,00E+00 (4)	8,00E+00 (8)	0,00E+00 (0)	100,00%
		3,00E+03 (3000)	<b>2,90E+03 (2900)</b>	1,60E+01 (16)	<b>8,75E+00 (8,75)</b>	0,00E+00 (0)	
2 hour	10 ppm	2,00E+04 (20.000)	2,00E+04 (20.000)	3,00E+00 (3)	1,40E+01 (14)	0,00E+00 (0)	100,00%
		2,00E+04 (20.000)	<b>2,00E+04 (20.000)</b>	2,80E+01 (28)	<b>1,50E+01 (15)</b>	0,00E+00 (0)	
2 hour	10 ppm	3,60E+04 (36.000)	2,20E+04 (22.000)	3,00E+01 (30)	1,13E+02 (113)	0,00E+00 (0)	100,00%
		2,60E+04 (26.000)	<b>2,80E+04 (28.000)</b>	3,40E+01 (34)	<b>5,90E+01 (59)</b>	0,00E+00 (0)	
2 hour	10 ppm	3,60E+05 (360.000)	2,20E+05 (220.000)	3,98E+02 (398)	2,85E+02 (285)	0,00E+00 (0)	99,90%
		2,60E+05 (260.000)	<b>2,80E+05 (280.000)</b>	2,97E+02 (297)	<b>3,27E+02 (327)</b>	3,33E-01 (0,33)	



Test Organisms	2h		3h		4h	
	Control	Test	Control	Test	Control	Test
	Cfu/plate					
<i>Escherichia coli</i> 8739	27	1	30	<1	11	<1
<i>Staphylococcus aureus</i> 6538	>200	<1	>200	<1	>200	<1
<i>Pseudomonas aeruginosa</i> 9027	11	<1	6	1	9	1
<i>Streptococcus faecalis</i> 5129	>200	<1	>200	<1	>200	<1
<i>Enterobacter aerogenes</i> 13048	51	<1	44	<1	40	<1
<i>Listeria monocytogenes</i>	146	<1	194	<1	165	<1
<i>Lactobacillus plantarum</i> 14917	120	<1	35	<1	39	<1
<i>Salmonella typhimurium</i> 14028	146	<1	133	<1	184	<1
<i>Saccharomyces cerevisia</i> 2601	152	<1	94	<1	184	<1

INVESTIGATION OF MICROORGANISMS REDUCTION BY THE USE OF UV-C & OZONE

# JIMCO®

## UV-C & OZONE Technology

UV-C AND OZONE SOLUTIONS FOR THE FUTURE

EUROPE · SOUTH AMERICA · NORTH AMERICA · AFRICA · ASIA · THE MIDDLE EAST

### JIMCO TECHNOLOGY REFERENCES

